

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. Authorization for this examiner's amendment was given in a telephone interview with Bill Schmidt on 12/5/2008.

The application has been amended as follows:

In the specification:

Insert on page 29, line 23: " and Technology AIST Tsukuba Central 6-1-1 Higashi 1-Chome Tsukuba-shi Ibaraki-ken 305-8566 Japan.

In the claims:

22. (New) An isolated soluble flavin ~~dependent~~ glucose dehydrogenase obtainable from *Aspergillus terreus*, or a mutant thereof which results from a deletion, substitution or addition of one amino acid residue, which:
(a) catalyzes a reaction for oxidizing glucose in the presence of an electron acceptor;
(b) has a 5% or less specific activity to maltose relative to the enzymatic activity to glucose;
and
(c) is inhibited by 1,10-phenanthroline.

Deleted: compound-binding

23. (New) The flavin ~~dependent~~ glucose dehydrogenase of claim 22, wherein its activity is inhibited by 50% or more in the presence of a 1 mM final concentration of 1,10-phenanthroline.

Deleted: compound-binding

24. (New) The flavin ~~dependent~~ glucose dehydrogenase of claim 22, which oxidizes a hydroxyl group at the 1-position of glucose.

Deleted: compound-binding

25. (New) The flavin ~~dependent~~ glucose dehydrogenase or mutant thereof of claim 22, wherein the flavin compound-binding glucose dehydrogenase is obtainable from the *Aspergillus terreus* deposited under the accession number FERM BP-08578.

Deleted: compound-binding

Art Unit: 1657

26. (New) An isolated soluble flavin dependent glucose dehydrogenase obtainable from Aspergillus terreus having:

Deleted: compound-binding

- (a) an optimum pH of pH 7.0 to pH 9.0;
- (b) a pH for stability of pH 4.5 to pH 8.5;
- (c) an optimum temperature of approximately 55°C;
- (d) a thermal stability at 50°C or below;
- (e) a molecular weight of about 130 kDa when measured by a gel filtration method, and about 85 kDa when measured by a sodium dodecyl sulfate-polyacrylamide gel electrophoresis;
- (f) a Km value of 49.7mM (D-glucose); and
- (g) an isoelectric point (pI) of the coenzyme-binding glucose dehydrogenase measured by an isoelectric focusing of about 4.4.

27. (New) An isolated Aspergillus terreus which is capable of producing the flavin dependent glucose dehydrogenase of claim 22.

Deleted: compound-binding

28. (New) An isolated Aspergillus terreus as deposited under the Accession number FERM BP-08578.

Deleted: I

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIFFANY M. GOUGH whose telephone number is (571)272-0697. The examiner can normally be reached on M-F 8-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Ralph Gitomer/
Primary Examiner, Art Unit 1657

/Tiffany M Gough/
Examiner, Art Unit 1657



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Fax Cover Sheet

Date: 15 Dec 2008

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Re:	CC:

☒ **Urgent** ☐ **For Review** ☐ **For Comment** ☒ **For Reply** ☐ **Per Your Request**

Comments:

Hello Mr. Schmidt,

Attached is a copy of the proposed Examiner's Amendment. Please review and consider. Please let me know if the Amendments are acceptable, no later than Friday 12/5/2008 by 4 pm. I may be reached at 571-272-0697. If you are unable to reach me by telephone could please fax or e-mail your response to 571-273-0697 or tiffany.gough@uspto.gov.

Thank you,

Examiner Gough

Number of pages 3 **including this page**

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